

Notice of Allowability

Application No.

10/054,307

Applicant(s)

CACERES ET AL.

Examiner

Art Unit

Ronald Baum

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/21/06.
2. ☒ The allowed claim(s) is/are 10-13 and 20-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

Examiner's Statement of Reasons for Allowance

1. Claims 10-13 and 20-29 are allowed over prior art.
2. This action is in reply to applicant's correspondence of 21 December 2006.
3. The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.
4. As per claims 10, 13 and 20-29 generally, prior art of record, Kargl, Frank, et al, "Protecting Web Servers from Distributed Denial of Service Attacks", Univ. of Ulm, 5/1/2001, entire document, <http://www10.org/cdrom/papers/409/>, ("Kargl"), fails to teach alone, or in combination, other than via hindsight, at the time of the invention, the features as discussed and remarked upon in the response of 12/21/2006 to office action of 8/21/2006.

Specifically, (as per claim 10, for example) prior art dealing with Web applications penetration testing, whereas client/server Web services/applications testing for compromise (i.e., authentication/access control to Web services via traditional input validation/scripting techniques, remote services and blackbox/whitebox functionality exorcising, etc.), is generally known to exist per se, (i.e., Melbourne, J., et al, 'Penetration Testing for Web Applications (Parts One-Three)', SecurityFocus, 2003-06-16, entire document, <http://www.securityfocus.com/infocus/1704>, ...1709, ...1722).

Nowhere in the prior art is found collectively the *italicized* claim elements (i.e., specific use of [embodied software agent based] system-calls proxy servers executing system calls and a virtual machine executing [received/routed] script[s] for the penetration testing of a target computer

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network target host), at the time of the invention; serving to patently distinguish the invention from said prior art;

“10. An agent embodied in a computer-readable medium for use in a system for performing penetration testing of a target computer network having a target host, the agent comprising:

a *system-calls proxy server* configured to

receive and *execute system calls* received via a network; and

a *virtual machine* configured to

execute scripting language instructions received via the network;

wherein

the *system calls received via the network are routed to*

the system-calls proxy server and

the *scripting language instructions received via the network are routed to*

the virtual machine.”

5. Dependent claims 11 and 12 are allowable by virtue of their dependencies.

Conclusion

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861 and unofficial email is Ronald.baum@uspto.gov. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at (571) 272-4195. The Fax number for the organization where this application is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
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1/10/07

Ronald Baum

Patent Examiner

